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ABSTRACT

The impact of urbanization on the residents of Hendricks County, Indiana is described in this report. Some costs and benefits of this process are enumerated. Data were obtained in 1968 from 25 state and local officials and businessmen, and from 116 interviews with farm and non-farm residents in Washington Township. The process of urbanization is described by the landscape changes, population growth, the economic base, and land use. Community service demands and costs are influenced by changes in local public services including education, government, public safety, health and sanitation, welfare and correction, recreation, continuing education and resource development, and highways and streets. It is noted that the differences between metropolitan core and urban fringe residents may have serious implications. (PS)

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Urbanization of a Rural County

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U.S. DEPARTMENT OF HEALTH,
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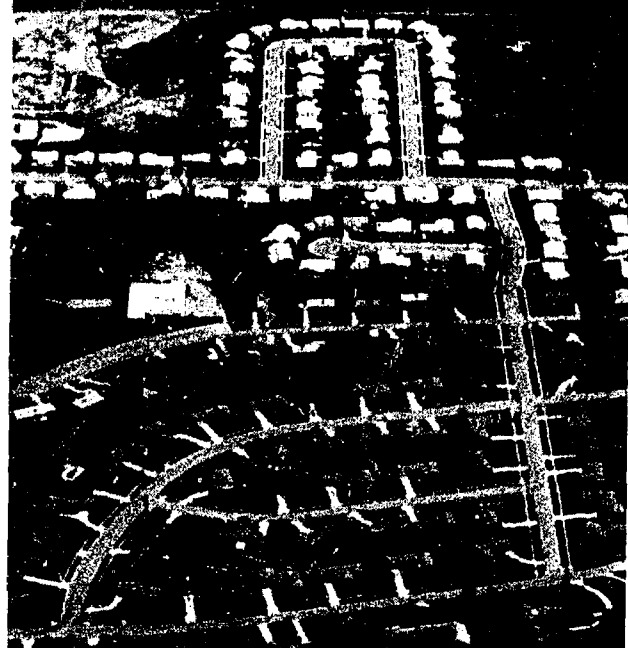
SUMMARY

The concentration of urban-oriented people on the rural fringe of growing cities has created a new mix of city and country residents, forcing both individual and community adjustments that have had a significant impact on both farm and nonfarm residents.

This study illustrates the impact of urbanization on the residents of Hendricks County, Ind., and enumerates some of the costs and benefits of the urbanization process. The analysis is based on a 1968 study of rapidly changing communities adjacent to the state's largest city and its capital, Indianapolis. Data were obtained from 25 state and local officials and businessmen, and from 116 interviews with farm and nonfarm residents in Washington Township.

Farmers in the urbanizing area have reduced the size of their livestock operations and are farming small, scattered fields. They complain of highway congestion, increased crime and higher taxes. In reality, they pay no more taxes than farmers in more rural parts of the same county, but benefit from inflated land values.

Nonfarm residents place a high value on privacy, quiet and "open space," but are concerned about the lack of recreational and cultural opportunities in the county, increased crime, inadequate public services and the difficulties of commuting to work.



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Agricultural industrialization and the adoption of urban life styles are facilitating the urbanization process. Both farm and nonfarm residents rate their interrelationships as good, and deem one another "progressive and open-minded."

However, the newer urban residents are viewed as having less "community interest and loyalty" than farm people.

THE PROCESS OF URBANIZATION

Urbanization involves an increase in population size and density, a gain in per capita residential wealth and a change to more intensive land use in a geographical community. Residents of an urbanizing area become more heterogeneous and develop greater economic and social dependency on the nearby metropolitan area. The appearance and the character of the community change, including a decline in agricultural dominance.

Urban life styles begin to predominate after a mixing of urban and rural values. What is "urban" and what is "rural" become harder to distinguish in mixed communities. Emphasis changes from production of goods and services to their consumption.

The term *urbanization* acquires different meanings as used in various contexts. Bishop defines it as the "extension of the urban process to rural communities and consists of the application of technologies through which communities become increasingly specialized and interdependent."¹ He sees the community changing from self-sufficiency and relative isolation to specialization, functional differentiation and the need for close linkage between separate parts. With intense specialization come the benefits of larger scale organization and a more broadly-based community structure. "Bigness" and "relatedness" are integral parts of such an urbanization process.

In the last few years, urbanization has occurred largely in the rural-urban fringes. Growth rate of the central cities has slowed, while the areas around them have grown at a remarkable rate. The new communities in these rural fringes have been made possible by improved highways, suburban shopping centers and better community services that enable people to live farther from their jobs and yet enjoy the advantages of the city.

Local government in once-rural areas responds to urban growth by adopting new and expanded services. Political action by new residents is often needed to press for programs that facilitate urban growth.²

¹ G. E. Bishop, "The Urbanization of Rural America," *Journal of Farm Economics* (December 1967), p. 1000.

² Alvan E. Sokolo, "Governmental Response to Urbanization," *Agricultural Economics Report No. 132*, Economic Research Service, U. S. Department of Agriculture, 1968.

The demand for more and better public services increases as the population increases. Pressures on elementary and high school facilities are especially strong. The market for private goods and services also expands, with new shopping centers, gasoline stations and a complex of service businesses developing along important transportation routes. Utility lines are extended into the country as residents demand most of the amenities of city life. And as expected, land prices soar.

All this has come about in the urbanizing eastern half of Hendricks Co. in varying degrees since 1950. The impact of rapid population growth is complicated by the lack of corresponding industrial growth. The development of these new commuter communities, or "commuterics," has accentuated problems of financing new public and private facilities.

This research bulletin reports the social and economic impact of urbanization in Hendricks Co. in general, and Washington Twp. in particular, as a case study of the urbanizing process constantly taking place around metropolitan centers.

Metropolitan Indianapolis and Hendricks County

Indianapolis, the state's capital, is a sprawling industrial-commercial-urban center growing from the heart of Marion Co. Its 500,000 residents make it twice as large as any other city in the state. Many of the city's inhabitants are employed in its major industries that distribute products nationally. The major industries include electronics, metal fabrication, pharmaceuticals and transportation equipment.

Indianapolis and Marion Co. form the core of an eight-county metropolitan area that dominates the

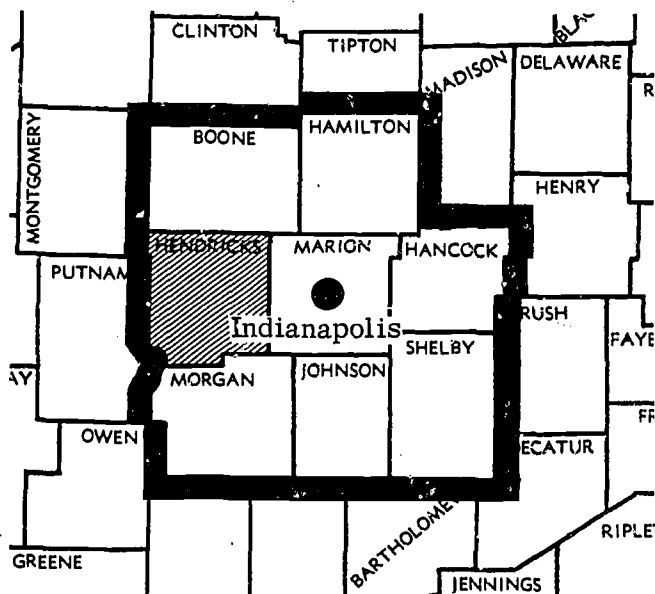


Figure 1. The Indianapolis metropolitan area.

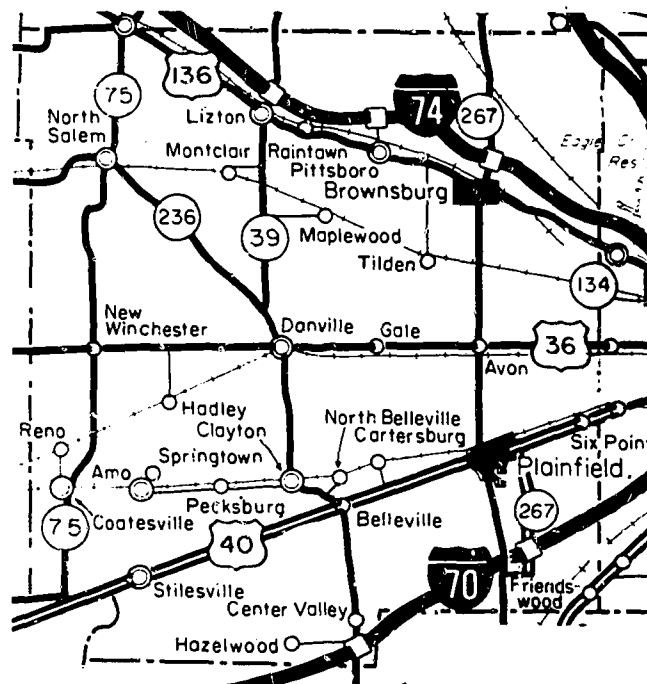


Figure 2. Hendricks County — its towns, townships and highway system.

geographical center of the state, constituting its largest-growth center. In addition to Marion Co., the area includes Boone, Hamilton, Hancock, Shelby, Johnson, Morgan and Hendricks counties (Figure 1).

These counties are served by an interstate highway system that converges more limited access highways upon Indianapolis than on any other city in the nation. The four interstates plus six U. S. highways are linked together by a circum-urban route around the entire city. With improved expressways into the city, the number of commuters from surrounding counties is expected to double between 1968 and 1975.

Hendricks Co., the subject of this study, is immediately west of the city, bordering on Marion, Boone and Morgan counties. Normally considered "rural," Hendricks County's population has doubled since 1950, aided by one of the highest in-migration rates in the state. Much of the growth has taken place outside its small towns in farming country. In one township alone, 36 new subdivisions have been developed. In 1960, 40% of the homes in the county had been constructed in the previous 10 years.

Close to 58% of the county's labor force worked outside the county, the highest proportion in the state in 1960. Almost all of the labor force commuted to work in Marion Co. and Indianapolis.

Two new interstate highways and three U. S. routes, including much-traveled U. S. 40, provide easy access to the city, some 25 miles from the center of Hendricks Co. (Figure 2).

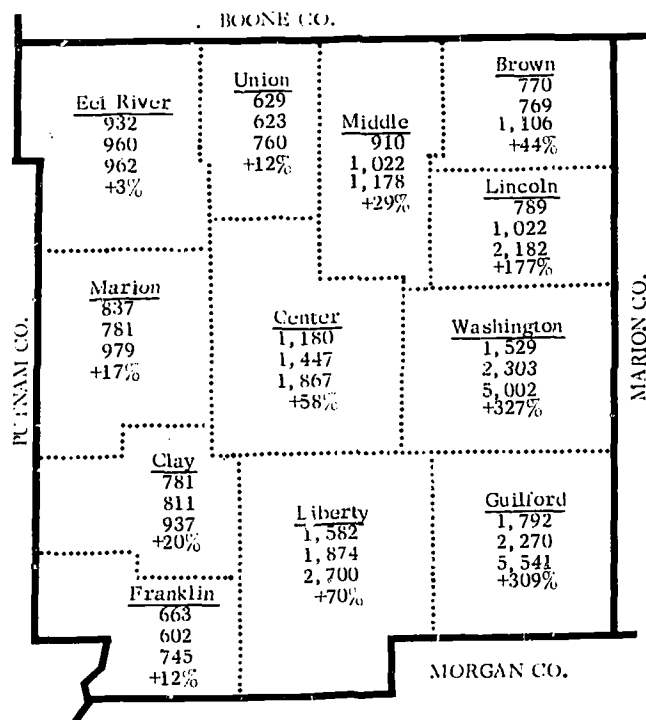


Figure 3. Population changes in Hendricks County townships, excluding incorporated towns, 1950 to 1960. (1st figure—1940, 2nd—1950, 3rd—1960, 4th—% increase over 20 yrs.)

Changes in the Landscape

The physical appearance of eastern Hendricks Co. is changing as new families move into the area. The main roads to Indianapolis are lined with businesses, homes and open farm lands. Along county roads there are dozens of new subdivisions as well as scattered homesites, all interspersed between patches of open country and an occasional farm home. Many farm buildings are rundown and unused, and most of the livestock have disappeared.

New schools and playgrounds are centrally located in three of the fast-growing eastern townships. Billboards advertise new homes and housing sites in subdivisions with impressive names like "Sugarwood Estates" and "Glen Elen." Traffic is heavy on narrow blacktop arteries designed as "farm-to-market" roads for an earlier generation of farmers.

Symptoms of the urban invasion are the problems of maintaining a clean water supply, operating septic tanks, dust and mud from seemingly endless construction work, mushrooming school populations, higher property taxes and the trials of commuting several miles to work each day.

The pattern of farms and scattered homes of commuters extends westward across the county. Often, strips of businesses and homes line the highways that lead, like spokes of a wheel, from the central city.

The mixed pattern continues to the fringes of small towns, and grows more sparse further from the metropolitan core.

Population Growth

The most rapid growth in Hendricks Co. has occurred in the three townships adjacent to Marion Co. Within this eastern file of townships—Lincoln, Washington and Guilford—there are two small but fast-growing towns, Brownsburg and Plainfield, and the unincorporated village of Avon. From 1940 to 1960 the rural nonfarm population in the three townships increased by 8,325 while the two towns added 7,300 people, in part from annexation. Meanwhile, the total county population more than doubled (Figures 3 and 4).

There are several small unincorporated villages of unknown population in the county. They include Avon, Cartersburg, Center Valley, Friendswood, Gale, Handley, Hazelwood, Maplewood, Montclair, North Belleville, Pecksburg, Raintown, Reno, Six Points and Tilden. Some of the villages on the eastern side of the county, like Avon, Friendswood and Six Points (Figure 2), have grown substantially in recent years. In some cases, larger named subdivisions now have more people than these older villages.

About half of the county's 1968 population lived in rural nonfarm homes, one-third in the 10 small towns and the balance on farms. Table 1 shows the big increase in urban and rural nonfarm population from 1940 to 1960, and the drop in rural farm popu-

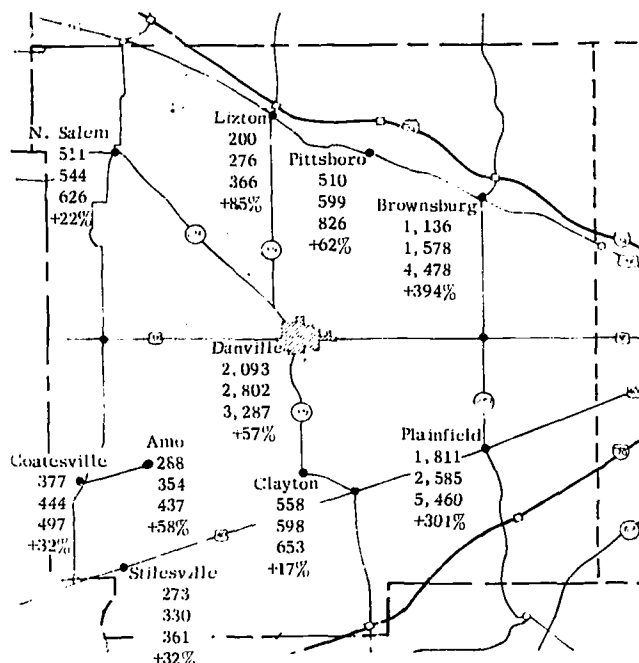


Figure 4. Population changes in incorporated towns in Hendricks County, 1940 to 1960. (1st figure—1940, 2nd—1950, 3rd—1960, 4th—% increase over 20 yrs.)

lation. In 1964, although close to 40% of the remaining farmers commuted to jobs away from home, Hendricks Co. still had more farms and a high proportion of land in farm use than the average Indiana county.

The county enjoyed its most rapid growth during the 1950's after changing very little from 1900 to 1940. The rate of in-migration slowed in the early 1960's. Census projections predicted a 1985 population about three times that of 1960, but the slowdown in growth during the 1960's makes the 1985 prediction appear rather high (Figure 5).

The Changing Economic Base

More and better jobs in the metropolitan area have encouraged migration into central Indiana, particularly Hendricks Co. Growth in nonfarm employment, improvements in per capita incomes and a big increase in residential property values have altered the economic base of this rural county.

Income

Average annual family incomes in Hendricks Co. just about doubled from 1950 to 1960, increasing from \$3,287 to \$6,409. The nearly-100% increase was enough to rank the county seventh in the state—up three places from the previous decade. The state's average increase was 26% less. Four of the eight counties in the Indianapolis metropolitan area were among the top ten income counties in 1960 (Table 2).

Inflation accounts for about 20% of the overall increase, but the balance represents improvement in real

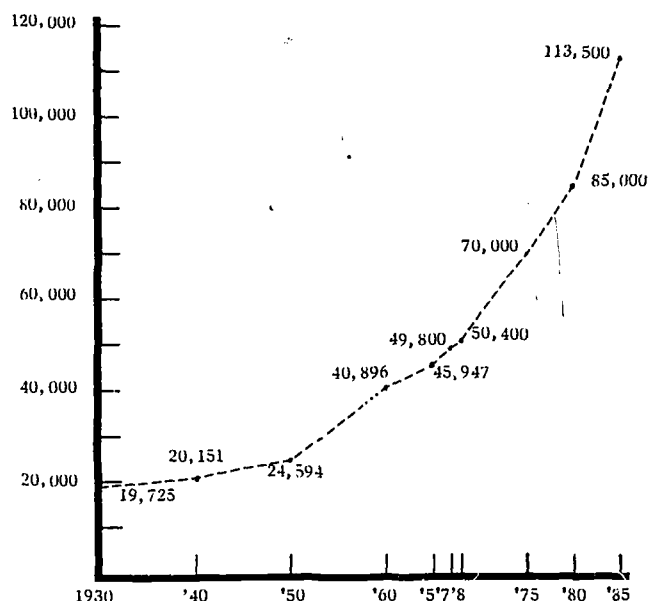


Figure 5. Population growth, actual and projected, of Hendricks County since 1930. (Sources: U.S. Bureau of Census, State Board of Health, Standard Rate and Data Service, and Indiana University Graduate School of Business.)

income. The most dramatic change in family income levels occurred in the over-\$5,000 classes, yet income levels of older residents and new migrant families have also improved (Table 3).

Wages for employed persons in the eight-county Indianapolis area averaged \$118 per week in 1965. The state average was \$115. Marion Co. workers were earning \$121 per week and persons employed by firms

Table 1. Residence trends in Hendricks Co., 1940 to 1960.

Kind of residence	Total population			Percent change	
	1940	1950	1960	1940-50	1950-60
Urban*		5,287	13,225		+150.1
Rural nonfarm	9,959	9,826	21,165	- 1.3	+115.4
Rural farm	10,192	9,381	6,506	- 8.0	- 30.6
Total	20,151	24,594	40,896	+22.0	+ 66.3

* Incorporated towns of 2,500 or more residents.

Table 2. Median family income of the top 10 counties in Indiana, 1960.

County	Median family income		Rank in 1950
	1960	1950	
1. Marion	\$6,609	\$3,636	3
2. Porter	6,589	3,574	5
3. St. Joseph	6,595	4,150	1
4. Allen	6,562	3,653	4
5. Lake	6,542	3,890	2
6. Elkhart	6,428	3,409	6
7. HENDRICKS	6,409	3,287	10
8. Hamilton	6,398	2,947	24
9. Madison	3,322	3,369	8
10. Johnson	6,236	3,037	18
State average	\$5,798	\$3,197	

Table 3. Number of Hendricks Co. families in various median family income classifications, 1950 and 1960, and percent change.

Level of income	Number of families		Percent change
	1950	1960	
Under \$1,000	670	382	- 43%
\$ 1,000-1,999	870	570	- 34%
\$ 2,000-2,999	1200	591	- 51%
\$ 3,000-3,999	1245	785	- 37%
\$ 4,000-4,999	925	1045	+ 13%
\$ 5,000-5,999	565	1440	+155%
\$ 6,000-6,999	315	1451	+361%
\$ 7,000-9,999	320	2798	+831%
\$10,000 & over	180	1752	+873%
Not reported	335	----	----
Total	6,625	10,814	+ 63%

Source: U.S. Census of Population.

in Hendricks Co. received \$93. The Indianapolis region ranked third among the state's 13 regions in wage levels, rated by the Indiana Employment Security Division. Wage levels rose 3 to 4% annually, beginning in the later 1950's and continuing into the 1960's, while the total payroll (wages x jobs) increased 6 to 7% annually.³

About 14% of Hendricks Co. families earned less than \$3,000 while 18% of the state's population were classified as low income families in 1960. In 1968, income estimates showed Hendricks Co. ranked fifth in the state in terms of usable income per household, according to Standard Rate and Data Service, Inc.

While inflation has raised dollar incomes about 2% per year since 1950, Hendricks Co. incomes have gone up much faster than the general price and income level for the nation. Both the decline in farms and a larger proportion of people working at higher paying jobs have contributed to better average earnings.

Employment

The increase in total jobs and the shift from farm to nonfarm employment are shown in Table 4. Close to 60% of these jobs were outside Hendricks Co.—most of them in Marion Co.

As the total population of Hendricks Co. increased by 66% in the 1950's, agricultural employment decreased. Meanwhile, construction and services showed a less-than-proportional increase in employment. Manufacturing, finance, insurance and real estate, and government employment—all relatively high paying jobs—showed big increases in the county.

In 1963 there were only 1,843 persons employed in Hendricks Co.—221 in manufacturing, 259 in services and 1,363 in retail and wholesale trade. Very little industrial growth took place in the county from 1954 to 1963, but the number of jobs in retail and wholesale trade and services increased relatively more (Table 5).

Few counties in the state have as small an industrial base as Hendricks Co. Of the 26 firms in manufacturing, 11 are printing and publishing firms, four make fabricated metal products, three make machinery, two manufacture clay products and six produce a variety of products. All are very small firms, averaging eight employees per firm in 1963.

Retail and wholesale trade establishments are larger but less numerous than 10 years ago. Total sales rose about 50% from 1954 to 1963—just about keeping pace with the population increase.

The biggest proportional increase in employment and payroll from jobs within the county has been in

Table 4. Number of Hendricks Co. residents in various employment classification, 1950 and 1960, and percent change.

Type of employment	Number persons employed		Percent change
	1950	1960	
Agriculture	2,262	1,524	— 32.6
Construction	642	915	+ 44.1
Manufacturing	1,901	4,436	+133.3
Transportation, communications, utilities and sanitary service	642	1,411	+120.0
Wholesale and retail trade	1,457	2,628	+ 80.4
Finance, insurance and real estate	282	660	+134.0
Service	1,461	1,923	+ 31.6
Government	368	866	+135.4
Unreported	159	385	—
Total	9,174	14,748	+ 61.0

Source: U.S. Bureau of Census.

Table 5. Number of Hendricks Co. business establishments and their employees, 1954, 1958 and 1963.

Type of employment	Number of employees			Number of establishments		
	1954	1958	1963	1954	1958	1963
Manufacturing	149	137	221	24	19	26
Retail and wholesale trade	818	1,055	1,363	290	351	350
Services	99	166	259	127	181	234
Totals	1,066	1,358	1,843	441	551	610

Source: U.S. Census of Business.

services. Medical and health service personnel have increased from four in 1957 to 48 in 1964. Other personal services increased five times in the same period.⁴ Growth in trade and service employment has been consistent with residential growth within the county.

The national trend toward more service and trade employment plus stable manufacturing employment is reflected in the entire central Indiana metropolitan area. Manufacturing employment in the metropolitan core (Marion Co.) went up only 5% from 1954 to 1963, while retail and wholesale trade employment was up 14% and service employment up 13%. But despite the small increase in industrial jobs in Marion Co., the number of commuters from Hendricks Co. working in these manufacturing plants more than doubled in the 1950's, and manufacturing jobs in Marion Co. became the largest single source of employment for Hendricks Co. residents. In 1956, some 2,884 persons commuted to manufacturing plants in

³ Wadsworth, H. A. *Community Data: Employment and Wages in Indiana, 1957-1964* (Supplemented). Publication EC-310 (Lafayette, Ind.: Cooperative Extension Service, Purdue University, April 1967).

⁴ *Ibid.*

Table 6. Number of persons employed by major occupational group in Hendricks Co., 1950 and 1960, and percent change.

Occupation	Number of employees		Percent change
	1950	1960	
Farmers, farm managers	1,706	1,180	— 30.8
Farm laborers, foremen	531	287	— 45.9
Professional, technical and kindred workers	791	1,966	+148.5
Managers, officials and proprietors	637	1,093	+ 71.6
Clerical, sales and kindred workers	1,873	3,510	+109.8
Craftsmen, foremen and kindred workers	1,383	2,511	+ 81.6
Operatives and kindred workers	1,363	2,511	+ 87.2
Private household workers	100	198	+23.7
Service workers other than private household	448	949	+111.8
Laborers (nonfarm)	357	479	+ 34.2
Unreported	132	445	
Totals	9,181	15,169	65.2

Source: U.S. Census of Population.

Marion Co. More than half worked in western Marion Co. By 1975, about 7,700 commuters are expected.⁵

The occupations of Hendricks Co. residents are shown in Table 6 for 1950 and 1960. The larger increases were of "professional, technical and kindred workers"; "service workers" and "clerical and sales workers." Farm employment dropped and low-paying occupations like "private household workers" and "nonfarm laborers" increased at a slower rate than the county population.

Changes in Wealth

The value of real estate and personal property has risen rapidly in the county, with improvements in the form of new homes, the chief source of increased wealth. Personal property has also increased rapidly.

Data on assessed valuations of real estate show that land and improvements in the 12 townships, outside of incorporated towns, rose 110% from 1950 to 1965. In the 10 incorporated towns, assessed value of real property increased 232%.⁶ Several annexations in that time added to the town property total but, in turn, reduced township valuations. Real estate and personal property values went up most in the townships and towns

⁵ Metropolitan Planning Department of Marion County, *Manufacturing and Commuting in Metropolitan Indianapolis* (Indianapolis, Metropolitan Planning Department of Marion County, 1957).

⁶ "Assessed valuation" represents only a fraction of the market value of property. In 1967, the latest assessment-sales ratio studies estimated the net assessed valuation figure in the county were 22% of full value, according to State Board of Tax Commissioners data. In 1963 personal property assessment practices were changed so that 1950 to 1965 comparisons of personal property values are not possible. Comparisons between 1950 and 1960 are made in later sections for "total net assessed valuation," which includes real estate and personal property assessed valuation data obtained from Hendricks Co. auditor's office.

with the largest population increases, but *per capita* property values declined in many of the rapidly urbanizing areas of the county.

In the townships, *per capita* property values dropped most in the rapidly urbanizing eastern side of the county, and in fact, dropped in all but one western township. All but two towns *increased* *per capita* valuations despite population growth. *Per capita* wealth in the unincorporated areas is about double that in the towns.

Four reasons seem likely for the opposite trends in *per capita* wealth in the townships and towns:

1. Annexation, particularly in Plainfield, increased total property values relatively more than it added population. (Six of the 10 towns annexed land from surrounding townships between 1950 and 1960.)

2. The small amount of commercial and industrial growth from 1950 to 1960 occurred largely within corporate limits of the larger towns.

3. Population in most unincorporated townships rose faster than in the towns.

4. Assessment decisions varied among towns and townships.

Wide variations in real estate and personal property values exist between rapidly urbanizing and the rural townships. Residents of the latter tend to have higher absolute levels of property wealth than do residents of the urbanizing areas.

The increase in rural nonfarm residents has lowered *per capita* wealth in terms of real estate and personal property. Evidence suggests that the homes, personal property and residential lots of the rural nonfarm are not as valuable as the farm real estate owned by full-time and part-time farmers formerly in the majority.

The increase in town residents has not lowered the average wealth *per resident* for the reasons noted earlier. Very likely absentee ownership of some industries, commercial establishments and other property is more common in town than in the country, and actual wealth *per town resident* is probably less than indicated in the data. In all cases the "net assessed valuation" figures represent perhaps a fifth of real market value of real estate and personal property.

(Rapid changes in the value of property due to inflation and increasing land values are not always reflected in assessed valuation data. All property in the county was reassessed in 1962 and new improvements are added to the tax rolls every year.)

Impact on Economic Base—Summing Up

Urbanization in Hendricks Co. is closely related to the availability of more and better jobs in the metropolitan core. Incomes in the county doubled in the 1950's as new migrants and older residents commuted to nonfarm jobs, largely outside the county. But the

county population has increased relatively faster than jobs in the metropolitan area, indicating some extra "drawing power" of the county to attract new residents. Easy access to the industrial plants located in western and southern Marion Co. may have encouraged growth. Industrial jobs within the county have increased very little, but employment in other businesses increased at about the same rate as the county's population.

Wealth in terms of value of land, buildings and personal property per resident has declined in the urbanizing rural areas of the county but is still almost double the average wealth in the towns. New rural nonfarm residents own less taxable property than older farm residents. Wealth in terms of intangible assets, nontaxable property, property owned away from home, and equity in real estate and personal property would affect the *real wealth* of individuals. For most families and individuals, the bulk of their wealth is in taxable property within the same political subdivision in which they reside.

The relationship between income, property and the tax base is of particular interest in a study of urbanization and is discussed later.

Changes in Land Use

Farms and farmland have given way to homes and lots in rural Hendricks Co. While new rural residences account for the biggest change in land use since 1950, new highway construction, expansion of railroad switching yards, purchase of land by a few industrial firms, and some recreational and commercial development have also moved land into more intensive uses. From 1954 to 1965, a total of 15,808 acres went out of farm use as the proportion of land in farms decreased 6% in that 10-year period (Table 7).

The *Indiana Soil and Water Conservation Needs Inventory* estimated 10,400 acres of land was in "urban and built-up" uses in 1958.⁷ A follow up study in 1967 estimated 25,610 acres in "urban and built-up" use.⁸ This means approximately 15,210 acres went into urban uses in this 9-year period, or about 1,690 acres each year. The "urban and built-up" classification used in the *Inventory* is similar to the "nonfarm land" classification in the *Census of Agriculture*. The major exception is the small amount of nonfarm acreage in streams, woods and wasteland included in the latter. Thus both data sources indicate approximately 1,600 to 1,700 acres converted to urban use annually from 1954 to 1967.

⁷ Indiana Conservation Needs Committee, *Indiana Soil and Water Conservation Needs Inventory* (Lafayette, Ind.: Cooperative Extension Service, Purdue University, 1964).

⁸ Unpublished Data, Soil Conservation Service, U. S. Department of Agriculture, Indianapolis, Ind.

Residential development has taken two forms: (1) about two-thirds of the new homes are in identifiable subdivisions where lots are contiguous and several homes are built at one time; and (2) about one-third are on scattered single lots or small tracts where homes were built at different times. Much of the residential development is along the north-south county roads in the eastern half of the county not seen from the major east-west highways.

Home construction continues at a fast pace (Table 8). The first multiple-family dwellings appeared in the early 1960's, but no large apartment houses have been built in the rural parts of the county. Single family homes predominate. Their average values range from \$12,000 to \$25,000 with a few approaching \$50,000. County zoning ordinances require that homes have at least 960 square feet, in effect putting a minimum value on new construction.

Two new interstate highways angle across the county, using about 27.5 miles of right of-way. A third cuts the northeast tip of the county. Approximately 1,400

Table 7. Trends in land use in Hendricks Co., 1954, 1959 and 1964.

Category	Year			Summary of changes, 1954-1964
	1954	1959	1964	
Nonfarm land (acres)*	22,838	24,754	38,646	+15,808
Farm land (acres)	244,042	242,126	228,234	-15,808
Percent in farms	91.5	91.7	85.5	- 6.0
Number of farms	2,142	1,753	1,496	- 646
Acres per farm	123.9	138.1	152.6	+ 28.7

* Includes area in residential and business developments, roads and highways, streams, and woods and wastelands that were excluded from farm land.

Source: U.S. Census of Agriculture.

Table 8. Building permits issued and subdivisions approved for unincorporated areas and three smaller towns in Hendricks Co., 1962 to 1967.

Type of improvement	1962	1963	1964	1965	1966	1967
Homes, single and multiple dwellings	240	336	262	275	270	298
Garages and house additions	40	56	58	77	56	67
Business buildings	15	18	15	19	19	26
Public buildings	0	3	1	5	7	6
Total permits	295	413	336	376	352	397
Subdivisions approved	12	21	17	10	21	10
Number of lots in subdivisions	132	290	231	118	235	152

Data from the Hendricks Co. Plan Commission. The commission, established about 1950, issued building permits to eastern townships from 1958-62, then acquired jurisdiction over all townships and the towns of Amo, Clayton and North Salem. Lots for new homes outside incorporated towns must be at least 20,000 sq. ft. Most subdivision lots are close to ½ acre. Many of the scattered lots are 3-, 4- and 5-acre tracts.

acres are used by these three highways. Expansion of a large, automated railroad switching yard and a large acreage purchase by one corporation for possible future development accounts for much of the land used for industrial expansion.

The land used for urban growth in Hendricks Co. appears to be near estimated requirements cited in other land-use studies. However, recent highway construction has used more land than is typical and industrial sites have used less.

The following are estimates of land needed for residential and associated development in rural areas: (1) one acre for 14 people in a typical suburban development for single-family homes, (2) one acre for retail space for every 300 families, (3) one acre for public and semi-public service used for 25 people, and (4) one acre of parks and playgrounds for 100 people.⁹

These rough estimates of land requirements and of population and industrial growth in the county from 1950 to 1968, indicate that about 4,500 acres of land were converted from largely farm use to residential and associated use in this 18-year period. New highway construction and industrial development have used up an additional 4,000 acres. The balance of land going out of farm use is in small-

acreage tracts held by homeowners and no longer considered "farm land." Some land is completely idle, awaiting development.

With home building continuing at a high level, the rate of highway construction declining and little change in industrial construction, perhaps 1,500 acres of land will be needed each year for residential and associated development in the near future. Considering the total county acreage of 266,880 acres, this rate of land conversion is not alarming.

The Hendricks Co. Plan Commission records and the county surveyor map indicate 96 subdivisions were established between 1950 and 1967. Number of subdivisions developed per township are: Washington, 36; Lincoln, 18; Guilford, 16; Brown, 6; Center, 6; Union, 4; Clay, 3; Liberty, 3; Middle, 3; Franklin, 1; El River and Marion, 0. The three eastern townships of Guilford, Lincoln and Washington contain 70 of the 96 new subdivisions started since 1950. Here the land use changes have been most pronounced, and tiny communities have created the greatest competition for use of land for agriculture. The subdivisions are clusters of about 12 to 15 homes, separated by undeveloped land, individual homes and a few farms. Some of these subdivisions are becoming linked together and may form the nucleus of new, dependent communities that are residential satellites to the metropolitan city. The spread and eventual interlocking of these urban populations generate the sprawling megalopolis or "super city" where most of the population will live a few years hence.

⁹Weeks, Silas B. *Land Use Planning in a Growing Economy*. (Raleigh, N.C.: North Carolina State University, Agricultural Policy Institute, 1965), p. 9. Data from the interviews with Hendricks County residents shows somewhat more land being used because of larger-than-average lot sizes for single family dwellings. This was taken into account in estimating actual land use changes.

COMMUNITY SERVICES — DEMAND AND COST

Rapid urbanization causes innovation and change in community services. Rural communities undergoing urbanization usually must increase outlays for services for at least three reasons: (1) the increase in demand from a larger population; (2) the desire for more and better government services associated with the cultural changes brought on by urbanization; and (3) problems created by more intensive land use such as the need for new water, sewer and related services.

Both new and old residents are caught up in the problems of providing essential services they have come to expect from local government. Minimum levels of service are no longer satisfactory as local units are asked to provide specialized, professional service approaching the quality provided in urban areas.¹⁰

Local Taxes

Much of the expense of providing public services at the local level is borne by local property taxes. With the exception of highways, which are financed

from state gas funds and federal aid, most of the large expenditures by local government units must be financed through levies on real estate and personal property. The big items are schools, county welfare, hospital support, police and fire protection, and general government functions.

Local tax levies on real estate and personal property in Hendricks Co. were almost five times higher in 1965 than in 1950, while population doubled in that 15-year period. County-wide taxes and school corporation taxes were more than five times higher, town corporations taxes rose fourfold, and township and library levies more than doubled (Table 9).

School costs account for close to 60% of local tax levies and have gone up most rapidly in the urbanizing areas. A part of school funding comes from a county-wide school tax, but a high proportion of local school levies are made within the school corporation area, causing school tax rates to vary widely across the county. (State aid to Hendricks Co. schools amounted to about 25% of their total operating costs, but much less for capital outlays.)

¹⁰Sokolo, p. 56.

Table 9. Kind and amount of local taxes levied in Hendricks Co., 1950 to 1965.

Local taxes levied	1950	1955	1960	1965	Percent increase
County-wide ¹	\$ 221,078	\$ 335,352	\$1,002,140	\$1,149,819	516
Township and library ²	76,398	102,510	172,225	192,429	252
School corporation ³	607,774	1,310,989	2,060,991	3,162,620	520
Town corporation ⁴	120,542	204,496	365,225	472,380	392
Total	\$1,025,792	\$1,953,347	\$3,600,581	\$4,968,248	484

¹ Includes county general fund, county welfare, county-wide school tax, cumulative bridge fund, hospital bonds and interest, county bonds and interest, and all other county funds.

² Includes township tax, township poor tax, civil township bonds, fire-fighting fund, public library fund.

³ Includes tuition tax, special school tax, school building bonds, cumulative building funds and lease rental.

⁴ Includes general fund tax, street fund, cumulative sewer and building fund, corporation bonds, police and firemen's pension fund, town park and recreation, and other town taxes.

Source: Annual reports of the state auditor.

The cost of county services, including welfare, hospital and general government functions, requires about 25% of local tax levies. These costs are, of course, shared equally by all county residents and the same rates apply county-wide. Taxes levied within incorporated towns have amounted to roughly 10% of total local tax charges since 1950 and have not gone up as rapidly as school tax rates or county-wide taxes. Township and library taxes represented less than 5% of total local levies. Library taxes are levied by a separate board and by 1965 were about as high as all township taxes. Functions performed by township government are gradually being taken over by other governmental units.

The cost of local taxes per person is shown in Table 10. The average Hendricks Co. resident paid about 2½ times as much in local taxes in 1965 than in 1950, on an average *per capita* basis. And they appear to be rising about as fast as average family income in the county. The "ability to pay" local taxes is about the same now as in the early 1950's for those families with rising incomes. People with fixed or slowly rising incomes and considerable property have been particularly hard-hit by fast-rising taxes, especially if they reside in urbanizing parts of the county with the highest tax rates. Farmers in those areas pay very high per capita property taxes on their relatively large real estate holdings.

Table 10. Average per capita taxes levied in Hendricks Co., 1950 to 1965.

Taxes	Amount			
	1950	1955*	1960	1965*
County-wide	\$ 8.99	\$10.24	\$24.50	\$ 24.83
Township and library	3.10	3.13	4.21	4.19
School corporation	24.71	39.43	50.40	68.83
Town corporation	4.90	6.15	8.93	10.28
Total	\$41.70	\$58.95	\$88.04	\$108.13

* Estimated.

Source: Annual reports of the state auditor.

Local tax rates for townships and towns increased steadily from 1950 to 1965. Tax rates on property outside incorporated towns have gone up 2 to 3 times in that period, and are slightly lower in the townships than in towns. Town rates have gone up from about 1½ to 3 times the 1950 rates. With the much higher per capita assessed valuation in the rural areas, the rural residents are paying more local taxes per person than their neighbors. In 1950, poll taxes ranging from \$2.50 to \$3.50 per person were divided among the four local taxing units. Poll taxes were discontinued in 1964.

Changes in Local Public Services

Public services provided at the local level can be classified by governmental units administering the service (county, township, town, school corporation or special district) and by specific functions (education, welfare, public safety etc.). The administration and financing of most public services are shared by local and state units and, in some cases, with the federal government. While many public services are paid for by taxes, some are financed, in part, by user fees.¹¹

The following analysis is concerned with public service functions performed by local governmental units paid for largely through local tax levies in Hendricks Co. These services include: (1) education (elementary and high school), (2) general government functions, (3) public safety (police and fire protection), (4) health and sanitation, (5) welfare and correction, (6) recreation, and (7) continuing education and resource development. Also included is another important public service—highways and streets—controlled in part at the county and town level, but financed largely by state and federal governments.

¹¹ Some services provided by town government, such as water, sewer and general government functions, are not covered in this analysis. Emphasis is put on tax-supported services that use a high proportion of county, school corporation and township tax revenues.

Local units of government spend tax money for a variety of programs and purposes than can loosely be classified under these eight aggregated service functions. But not all programs fit neatly into categories, particularly some of the township's activities.

The public service functions performed primarily by the four local units of government are shown in Table 11. Some functions are carried on to some extent by all four units but other functions are not performed at all by a particular unit. The units are ranked 1-2-3-4 across the table in relation to expenditures for each service function, "1" indicating the unit that spends more on that function than any other unit.

As part of our analysis of Hendricks Co. public service institutions, we have briefly examined the changes in the services from the standpoint of changes in: (1) the form or structure of governmental units providing the service; (2) the service activities themselves (new, improved or intensified); and (3) the level and source of expenditures for the service, including changes in financing policy. Possible relationships between innovations in public services and urban growth are also examined with emphasis on those services requiring the largest local expenditures.

At the end of this section is a summary table of the general service functions and institutions created or reorganized in the county between 1950 and 1968 (Table 14, page 17).

Education

Educational services use more tax dollars than all other local public services combined, and school systems have undergone more changes than most other local units.

The 1959 school reorganization law and a big increase in student enrollment had major impact on Hendricks Co. schools. In 1950 the schools were under township boards and trustees with 12 different school districts, 16 elementary schools, and a small high school in every township except Brown. Between 1961 and 1965 the 12 districts were combined into six new school corporations operating seven high schools and 17 elementary schools. County enrollment in all schools went up about 2½ times from 1950 to 1965. In the rapidly urbanizing eastern townships, enrollments went up about 3½ times in the same period (Table 12).

Assessed valuation per student dropped in all but one township following reorganization, the increase in enrollment and lower valuation per capita explained earlier. A combining of high valuation with lower valuation townships (like Brown and Lincoln) brought assessed valuation per pupil much closer together in the six new school corporations than they were in the 12 old township school districts. Consolidation has gone a long way toward equalizing the tax

Table 11. Ranking in expenditures for major public service functions by the four local units of government, Hendricks Co., 1968.*

Function	County	Ten incorp. towns	Twelve twps.	Six school corps.
1 Education (schools)	3	2	4	1
2 General government functions	1	2	3	None
3 Public safety	2	1	3	None
4 Health and sanitation	1	2	3	None
5 Welfare and correction	1	None	2	None
6 Recreation	None	1	None	2
7 Continuing education and resource development	1	2	4	3
8 Highways and streets	1	2	None	None

* Exact disbursements by function are difficult to compute because accounting systems are not all on a functional basis. Some services are so broad that almost all local units are involved.

burden of schools across the county and, in some areas, has mitigated the unequal impact of urbanization, but the lower valuation per student reduced the property tax base for financing education.

The larger high schools are offering a broader curriculum and many new educational services, such as driver training, special remedial courses and improved counseling services. Elementary schools have also made improvements but still do not offer kinder-

Table 12. School enrollments and assessed valuation per student by township (1950-51) and by school corporation (1965-66) in Hendricks Co.

Township	School enrollments		Assessed valuations per student	
	Townships (1950-51)	Corporations (1965-66)	Townships (1950-51)	Corporations (1965-66)
Brown	111	2,383	\$18,655	\$6,504
Lincoln	509	(Brownsburg Community School)	7,110	
Center	734	1,575	8,077	7,317
Marion	177	(Danville Community School)	13,654	
Clay	363	1,801	9,808	6,502
Franklin	175	(Mill Creek Community School)	16,379	
Liberty	501		8,967	
Eel River	324	1,232	9,871	7,758
Middle	313	(Northwest Hendricks)	9,491	
Union	177		11,425	
Guilford	869	2,925	5,886	6,294
		(Plainfield Community School)		
Washington	462	1,925	8,434	6,800
		(Avon Community School)		
Total	4,685	11,444		
Average valuation			\$8,750	\$6,736

garten. In some cases the old buildings in use are considered unsafe.

Measuring "quality" changes in educational services is not easy, for school authorities do not always agree on quality criteria. One readily available measure that may have some relationship to quality of schools is the teachers' training and experience. Improvements in teacher qualifications can be seen in Table 13 where "tuition factor ratings" for two different school years are shown for all school corporations.

Hendricks Co. teachers are becoming better trained and/or more experienced, but only teachers in Danville and Plainfield schools rated above the state average of 1.030 in 1968.

Like school corporations in other counties, Hendricks Co. schools are getting a smaller proportion of state aid today than in 1950. Only about 25% of current operating costs are now borne by the state, compared to about 40% in 1950. Local school tax rates in 1968 were nearing the \$4.95 adjusted tax rate maximum allowed by state law.

The experience of the Avon School Corp. in Washington Twp. illustrates the problems of schools serving a rapidly urbanizing area. The total school enrollment went from approximately 450 in 1950 to 1,670 in 1968. By 1975 the enrollment, conservatively estimated, will reach 2,667, requiring the construction of about five new 30-pupil classrooms each year. A \$3 million building program will soon be underway, adding new high school and elementary facilities. A new elementary building was completed in 1965, and additions to the high school building were made in 1958 and 1967.

If current capital outlay plans are followed, the ratio of total school indebtedness to township assessed valuation will be about 11% in the early 1970's. Tax rates will likely range between \$6 and \$7 per \$100 assessed valuation.¹²

Surprisingly, neither the school debt nor tax rates are excessive for the Avon schools compared to other community's schools, despite the tremendous growth in school enrollment. Several factors seem to have held school tax rates in line with other school corporations serving non-urbanizing areas:

1. School operating costs per pupil are below the state average. This may be due, in part, to efficiencies gained in a larger school unit and perhaps to a policy of restricting school expenditures.

2. Building costs have been spread out over many future years by means of bonding, loans and lease-rental arrangements.

3. While assessed valuation per pupil had dropped with expanding population and little industrial growth, the average residential home in Washington Twp. has a relatively high value.

4. County-wide school tax levies and higher-than-average state aid have led to some sharing of increased costs between other county school corporations, the state and the Avon schools.

Considering the improvements in income enjoyed by most people in Hendricks Co., the burden of increasing school costs has not been particularly heavy for the typical resident. But those with substantial property holdings and/or low incomes have felt the pressure of rising per capita school taxes rather strongly.

General Government

General government functions include services by county, town and township officials, such as the county auditor, assessor, judge, clerk and other courthouse workers; the plan commission, county commissioner and other county boards; town boards, town chairman; and township trustees and township advisory boards. These are the legislative, regulatory and administrative services involved in running local government and are herein considered separate from public safety, welfare and other specific governmental services discussed later.

Fewer changes have occurred in the organization and costs of general government than in schools and other specialized services. At the county level, two major institutions—a county plan commission and a superior court—have been established since 1950. By developing and administering policies on land use controls, the plan commission has had considerable effect on planning and zoning matters in the unincorporated areas. The need for such a local planning

Table 13. Tuition factor ratings* for Hendricks Co. school corporations and township schools, 1963-64 and 1967-68.

School corporation or township-district	Tuition factor ratings	
	1963-64	1967-68
Avon Community Schools	1.0031	1.0105
Brownburg Community Schools	.0852	1.0047
Danville Community Schools	1.0103	1.0619
Mill Creek Community Schools	.9836	1.0217
Plainfield Community Schools	1.0347	1.0376
Northwest Hendricks Community Schools		.9862
Eel River Township Schools	1.0526	
Middle Township Schools	.9680	
Union Township Schools	.9233	
State average	1.0200	1.0300

* Based on training and experience of teachers with 4 years training and 6 or more years experience equal to 1. Earlier comparisons not possible because of a change in rating scale prior to 1963.

Source: State Department of Public Instruction.

¹² Ball State University. *A Study of Organizational, Educational, Financial and School Building Needs—Avon Community School Corporation*. School Survey Services No. 44 (Muncie, Ind.: Ball State University, 1967).

unit is a direct outgrowth of urbanization. In 1963, the state legislature provided for a new superior court in the county to help handle an increased number of civil and criminal cases.

The number of non-elective jobs in county government has changed very little with only small additions in some county departments with general functions. School reorganization has eliminated one county official—the county superintendent of schools. In recent years a veteran service officer and a weight and measures inspector were added to the county staff.

County commissioners have had to grapple with increasingly complex problems brought on by urban growth and have increased responsibilities in many areas of county government service. Over the years, county commissioners have appointed several special boards to handle environmental health, sanitation, hospital and planning services that report to the commissioner and county council.

General public service functions performed by town officials and employees have not changed a great deal. The number of full-time employees has increased in the towns of Plainfield and Brownsburg, but has changed little in other slower growing towns. No new towns have been incorporated since 1950, nor have any larger towns changed to a city form of government, even though three of the 10 towns have more than the 1,500 population needed to create a fifth-class city.

Township government has declined in importance since 1950. The creation of independent school corporations in the early 1960's took away their most important single function. In terms of general legislative-administrative functions, the townships have little authority outside of keeping up some public cemeteries, administering dog tax and compensation programs, weed control authority, and some counseling and arbitration functions for township property owners. Township government has not taken any leadership in solving sanitation and other environmental health problems brought on by urbanization, probably due in part to small budgets and to lack of clear-cut authority in these areas.

Some township officials have been active in creating separate library boards and new library facilities. These are separate institutions with their own taxing authority and budgets, usually including a town and surrounding township and, in some cases, operating in two townships. Library tax levies almost total the township tax levies in the county, with seven of the 12 townships and six of 10 towns enjoying library service in 1968. Library service has improved, but has not been expanded to additional towns or townships for many years.

The amount spent on general government services is hard to estimate because of difficulties in separating general service functions from more specific functions in Hendricks Co. Data from state-wide summaries show cities and towns generally spend more on general service functions than county or township government. These general functions probably use 10% to 15% of all local tax levies compared to about 60% for schools.

Public Safety

Responsibility for police protection falls on county and town government, while fire protection is provided by town and township government in Hendricks Co. The Hendricks Co. sheriff's department has jurisdiction in all unincorporated parts of the county and is supported by the county general fund. The number of deputy sheriffs went from two in 1950 to four in 1968 with small increases in office staffing. The sheriff can draw on 15 reserve deputies, who are citizen volunteers available for emergency duty.

The 10 towns in the county provide their own police protection within corporation limits. Their total force in 1968 was: Plainfield, 11 men; Brownsburg, 6 men; and Danville, 5 men. The seven other small towns each hire a town marshall, bringing the total number of full-time town police officers in the county to about 29.

Rapid population growth in the eastern half of the county has led to a decline in the number of police officers per 1,000 residents. The scarcity of police protection is particularly noticeable in the unincorporated areas of these eastern townships. Washington Twp. has well over 7,000 people who depend on county and state law enforcement officials because they have no police department of their own.

The ratio of full-time police officers to town residents in 1960 was one officer to about 600 residents. In the unincorporated area served by the county sheriff's department, the ratio was about one officer per 4,800 residents.

Urbanization has also brought a change in the nature of crimes and enforcement activities of the police force. Biggest increases in crime include juvenile delinquency, largely related to drinking and car thefts, and house burglaries in the new residential areas. Police officers now serve many more papers and summons and get involved in a large number of civil actions. Proximity to a large city and presence of a correctional school for boys contribute to crime in the county. Police officials claim there is no organized gambling or prostitution in the county, but frequently must apprehend individuals who have committed serious crimes in the central Indiana area.

Hendricks Co. is served by Indiana State Police out of district headquarters in an adjoining county. Ten

officers were assigned primarily to the county in 1968, but were subject to calls for duty elsewhere when needed. State Police are assigned largely to traffic control and highway law enforcement along the major routes in the county. The new interstates and increased traffic on other highways have led to a gradual build-up in State Police serving the county. The state officers reinforce the sheriff's department and town police during general emergencies that require a large force of men.

Fire protection service has improved a great deal in recent years. Hendricks Co. is served by 14 different fire departments, manned by 250-275 volunteers and paid firemen. Financial support comes from towns and township combinations; no county, state or federal monies are used. All but four departments were established before 1950, but those serving the eastern side of the county have grown in number of firemen and amount of equipment. Only a few firemen in the largest town are full-time employees; others in the county are paid a small amount for each fire run; some are paid a small clothing allowance, and others serve for no pay at all.

All towns and townships except Marion township support their own fire department. A county-wide communication system is used to signal for backup help on large fires. Any department will respond to another unit's request for aid, and without charge. This backup help is important because a number of volunteer firemen are employed outside the county during the day and hence not available for duty. The result is a reduced day-time force in the heavily populated eastern townships. A county-wide Fire Chiefs' Association coordinates activities between individual fire fighting units.

Health and Sanitation

Perhaps the most significant innovation in public services is the Hendricks Co. Hospital east of Danville. This 70-bed general hospital is the only intensive care facility in the county.

The hospital was financed, in part, by federal grants and a bond issue to be paid off with county taxes first levied in 1960. For three years some operating costs were paid by the county, but user fees have made the hospital self-supporting in terms of operating expenditures. In 1968 the Hospital Bond Fund required a county tax rate of 32¢ per \$100 valuation.

A separate Hospital Board appointed by the county commissioners sets hospital policies and hires an administrative staff. The hospital meets both state and federal standards and has had a high occupancy rate since starting operations in 1961.¹²

Long-term care facilities are limited in size and are rated lower in quality. Three nursing homes in the county have 37 beds, all requiring modernization and meeting only about 40% of current needs. State medical authorities have given the county a high priority rating for funds to construct another 22 beds and to bring existing facilities up to state and federal standards.¹⁴

Another important health service, established in 1963, was a county health department employing a doctor as county health officer and two full-time professional workers—a sanitarian and a nurse. The department has actively implemented a broad range of programs in environmental and personal health and was instrumental in getting county ordinances passed regulating garbage and trash disposal and in starting two new sanitary landfill operations. Most of the educational and regulatory work in sanitation has been needed in the eastern townships where a large number of homes have been built.

A new sanitary district in the southwest corner of the county built and operates the only public sewage disposal system outside an incorporated town. With the build-up of a large mobile home subdivision, septic tanks failed. A neighborhood association formed a special conservancy district with taxing powers and authority to operate a public sewage system. A beginning tax levy of \$7.72 per \$100 valuation was proposed pending approval by state tax officials. If approved, the tax rate for the special district alone would exceed the total rate of \$7.34 in Guilford Township for all local property taxes in 1968.

Welfare and Correction

The county Department of Public Welfare administers most of the welfare services in Hendricks Co. Township poor relief gives supplemental help under the direction of township trustees, and the county home serves about 20 residents.

Almost a dozen different programs, including Aid to Dependent Children (ADC), old age assistance, medical aid and services to disabled children and adults, are offered to county residents by the welfare department. County taxes pay for approximately 20% of the major public assistance programs, but some smaller programs take up to 75% local funds. State and federal regulations, more than county policies, determine eligibility and benefits for the programs heavily reimbursed by the states.

The size of the county welfare department staff has changed little in recent years. The director and three case workers plus some part-time help have handled a slowly increasing work load in the ADC program. Case

¹² Indiana State Board of Health. *1966-67 Indiana Hospital and Health Facilities Plan* (Indianapolis, 1967), p. 44.

¹⁴ *Ibid.*, p. 45.

loads have declined in old age assistance as more of the elderly depend on Social Security benefits. The number of people helped by welfare programs changed very little in the 1950's and 1960's despite big population growth.

The ADC program was used by 33 families and 115 children in 1968, the only program with a substantial increase in numbers. Most of these costs are paid by the state, however. Surprisingly, the county welfare budget was *lower* in 1968 than in 1950—the only county service expenditure to go down in that period. The amount of state funds used for welfare in the county has gone up very little.

Statistical evidence and observations suggest four reasons for the low welfare expenditures: (1) Higher per capita incomes in the county and consequently less dependence on public aid, (2) more jobs available in nearby metropolitan area, (3) relatively fewer old people receiving more Social Security payments, and (4) conservative policies on eligibility and benefits.

Urbanization in the eastern townships and the resulting increase in the proportion of young families have increased the number of broken homes and children without parents. Jobs are available to most mothers who wish to work outside the home, and they generally have enough education and mobility to obtain employment.

The welfare department does not participate in the federal food stamp program that would bring more federal aid to the county.

A small but significant improvement in child welfare programs began in the early 1960's when a group of citizens began a retarded children's program for children with mental disabilities. A non-profit association now operates a facility where children receive special training and care from a professional staff. Part of the operating costs is paid out of the county general fund.

Township poor relief has declined in importance and used about $\frac{1}{4}$ less funds in 1968 than in 1950. Several township trustees distribute federal government commodities to a few poor families in their township. The township pays only for distribution. A small amount of medical aid, temporary relief and a variety of direct but relatively inexpensive financial aids can be extended to township residents by the trustee acting as "overseer of the poor." But townships that have more than doubled in population are spending less on poor relief today than in the early 1950's.

The County Home and County Farm have changed little over the years. In 1951 the Home served 29 residents and since then has served as few as 19. The 1968 budget for the County Home and Farm totaled

\$56,000, with receipts from the Farm and other sources expected to bring in about $\frac{1}{4}$ of this amount.

The only county correctional institution is the jail located in Danville. This 100-year-old facility holds only 25 inmates and is considered obsolete by many county officials. The staff at the county jail includes one full-time and one part-time matron, plus one of four deputies. The jail is often overcrowded and extra county appropriations are needed for food and operating expenses.

A relatively recent innovation in correctional efforts has been the appointment of a full-time county probation officer who works with the county judge. Crime, juvenile delinquency and convictions have increased in about the same proportion as population, causing a larger work load for all officials concerned with law enforcement and administration of justice in the county.

Recreation

Public recreational facilities were operated by four of the towns and all of the school corporations in Hendricks Co. in 1968. County government had no facilities or programs that could be considered recreational, nor did any of the towns or townships have organized recreation or park departments. Private recreation enterprises devoted a larger total acreage to a variety of recreational land uses than did public facilities. Both public and private facilities were largely for outdoor rather than indoor recreation.

Public recreation programs and facilities have shown little growth or change in recent years despite population growth. Outside of school programs conducted primarily for school age children, little has been done to offer recreational services to the general public.

The county schools had 298 acres in recreational lands in 1964, and more land has been developed since then. These are largely children's play areas—softball and baseball fields and tennis courts. Summer recreation programs were receiving modest support by some school corporations. No school had swimming facilities.

The county's only outdoor public pool in 1968 was located in Ellis Park at Danville. The park also provided facilities for picnicking, children's play and tennis. The only other three town parks offering recreation facilities are: Brownsburg—picnicking and play area; Plainfield—picnicking, play area and tennis; and Pittsboro—picnicking.

Private recreational services were being offered at 13 different sites totaling 507 acres in 1964. Six of these sites had a total of 28 acres of water. Several facilities offered more than one recreational activity. The kind of activity and number of sites offering the

required facilities were: golfing, 4; driving range, 2; camping, 5; picnicking, 5; field games, 3; archery and target shooting, 2; children's playground, 3; lake and pond fishing, 5; stream fishing, 1; horseback riding, 1; swimming, 1; and boating, 2.¹⁵

While public *outdoor* recreation facilities were not abundant, *indoor* recreation facilities were almost nonexistent, according to a 1960 Indiana State Board of Health Survey.¹⁶ The only public indoor recreation facilities listed were the seven libraries. The county had no public auditorium or club, game, art or craft rooms, and no public gymnasium other than those in the schools. By 1968 there were no significant additions to publicly-owned recreational facilities, although some attempts were being made to establish teen-age centers in the two largest towns.

Continuing Education and Resource Development

Out of school, informal, continuing education for all citizens is the major responsibility of two dissimilar organizations—the Cooperative Extension Service and the public libraries. Several other local institutions have some continuing educational functions related to their primary responsibilities, but only the libraries and the Extension Service have continuing education as their main focus.

The Cooperative Extension Service is a partnership between the U. S. Department of Agriculture, Purdue University and the county. In Hendricks Co. approximately half of the support for the local unit comes from the county general fund. The professional extension staff conducts educational programs in agricultural production, marketing, family living, youth, community resource development and public affairs. An extension advisory board and council made up of county residents give direction to the program.

The Extension Service has experienced new demands to move into urban educational problems while improving programs in technical agriculture and rural life. Emphasis has shifted to the application of total university know-how to problems of both rural and urban citizens. More nonfarm than farm residents participate in 4-H and homemaker clubs. County extension agents are involved in many urban development problems, including land use planning and controls, care of yard and garden care, hobby livestock and the upgrading of community services. Youth and family living programs are being reoriented toward social and cultural needs of both urban and rural residents.

The extension office also cooperates with the County Fair Board in putting on the annual Hendricks Co. 4-H Fair. Funds for construction and maintenance of the fair grounds, plus a small amount for fair operation, come in part from county tax revenues.

There are public libraries in the incorporated towns of Amo, Brownsburg, Clayton, Coatesville, Danville and Plainfield, and in the village of Avon (see Figure 2). Each library serves the township in which it is located; the Brownsburg library serves Brown Twp. as well as Lincoln Twp. Five townships and four small towns are without local library service. Libraries are supported with a property tax levy in the towns and townships which they serve and receive relatively little funds from nontax sources.

The six libraries were established between 1901 and 1928. While more books are in circulation and more people use the libraries today, there have been no fundamental changes in library service, such as establishment of a county-wide library system or use of bookmobiles, to extend service to new areas. One library has established a branch station in a nearby town. Libraries serving the urbanizing eastern townships have experienced the greatest increase in the number of borrowers and number of volumes added to their collections.

Several local institutions work on problems of conservation, natural resource development and environmental control. The Hendricks Co. Soil and Water Conservation District (SWCD) is concerned with conservation and development of soil and water resources. The directors of the SWCD advise the county Soil Conservation Service (SCS) staff in their work with property owners to improve land-use practices. The county contributes some money to the SWCD for part of the cost of operating the county SCS office and also for financing a comprehensive soil survey of the county.

The SCS staff has become involved in the soil and water problems inherent in rapid urban development. Many of the land-use planning decisions made by the county planning agency require soils information supplied by SCS. Problems of sewage disposal, water supply drainage and erosion are all accentuated by urbanization and the move toward more intensive land use.

Two special conservancy districts have been created in the county, both with taxing power. One is a four-county conservancy district covering a large watershed; the other a small sanitary district created for sewage disposal in a built-up area.

The Mill Creek Conservancy District covers parts of Hendricks, Morgan, Putnam and Owen counties. It is one of dozens of multi-purpose watershed districts organized in the state to build flood control structures, develop recreational areas and encourage

¹⁵ Indiana Department of Natural Resources. "Local Needs and Responsibilities—Master Plan for Acquisition and Development (Supplement 1)," (Indianapolis, 1964).

¹⁶ Indiana State Board of Health. "Recreation in Indiana," (Indianapolis, 1960).

conservation practices along a large stream. The federal government shares costs with the district and provides the bulk of funds, but an initial tax levy of 50¢ per \$100 valuation was made in 1968 on property owners within the watershed.

A County Drainage Board was set up in each county by state legislation in 1965. The three county commissioners serve as the board and work with the county engineer and surveyor to keep existing drainage channels open, and to create new "legal drains" where needed. County government in the past accepted responsibility for some drainage problems, but the recent legislation defined more specific duties for the commissioners and more definite responsibilities. Costs

incurred are paid out of a county General Drain Improvement Fund.

Highways and Streets

The County Highway Department, under the direction of the county commissioners, highway supervisor and county engineer, is responsible for construction and maintenance of the county highway system. In terms of number of personnel and size of budget, the department is second only to the school corporations.

Most of the funds for county highways come from state and federal gas taxes and state license fees. A small county tax levy going into a cumulative bridge fund is the only local tax support for county roads. In 1967, the State Motor Vehicle Highway Account

Table 14. New and reorganized public service institutions created in Hendricks Co. since 1950.

General service function and institution	Year established	Specific service function	Governmental unit creating or operating the institution	1968 local budget or tax levy
A. Education				
Six reorganized school corporations	1961-65	Formal, in-school education, grades 1-12	County school committee and legislature	\$4,140,045
B. General government				
1. Superior court	1963	Handles civil and criminal cases in county	State legislature and county	\$ 24,796
2. County plan commission and board of zoning appeals	1951 (made county-wide in 1963)	Land use planning and control	County	\$ 18,271 ^a
3. Veterans service officer	1968	Advisory services to veterans (part-time)	County	\$ 4,175
4. Weights and measures inspector	1968	Checks weighing and measuring devices	County	\$ 5,500
C. Public safety				
1. Avon fire department	1963	Fire protection in Washington Twp.	Township	\$ 12,000
2. Hazelwood, Cartersbury and Belleville fire departments	1953 & 1954	Fire protection in Liberty Twp.	Township	\$ 1,000 each from Twp.
D. Health & sanitation				
1. County general hospital	1961	Intensive health care and diagnostic service	County	\$ 255,744 ^b
2. County health department	1962	Environmental and personal health programs	County	\$ 42,877 ^a
3. Clark's Creek conservancy district	1967	Sewage disposal in area east of Plainfield in Guilford Twp.	Special district	\$7.42 tax rate on property in dist.
E. Welfare & correction				
1. Retarded children's program "Opportunity Cottage"	1960	Provide care and training for retarded children	County	\$ 13,067
F. Continuing education & resource development				
1. Mill Creek conservancy district	1968	Flood control, conservation and recreation in Mill Creek watershed (4-county area)	Special district	50¢ tax rate on property in district
2. County drainage board	1967	Maintain and construct legal drains	Legislature and county	Approx. \$ 50,000

^a Income from fees offsets part of this cost.

^b Annual tax levy to retire hospital bonds—no operating cost from county.

provided \$358,210 for the county highway system and \$144,271 for town streets. The Cumulative Bridge Fund contributed \$115,942, and the Federal Aid Secondary (FAS) Funds added \$35,719 to the county highway system for a total of \$709,871. FAS Funds are apportioned to the county and available for use on approved FAS roads. The amount actually used varies from year to year, depending on the amount of work contracted under the program.

The department maintains 738 miles of county roads including about 20 miles within town limits. Close to 40% of the roads were surfaced with bituminous material in 1967 and 60% with gravel. Several more miles of gravel roads are surfaced every year, and new bridges are constructed at the rate of about one a year.

Use of larger, more efficient equipment has enabled the highway department to handle more roads with fewer men than in the 1950's. In 1968, 29 full-time men were employed and some part-time help is added in summer months.

Urbanization and the resulting increase in traffic in the eastern townships have caused the department to spend about two-thirds of its time and funds on the eastern half of the county. Heavier traffic has required a speedup in hard-surfacing of gravel roads, more frequent repairs of roads and bridges, and the need to widen right-of-ways. Priorities for new construction and repairs are based on traffic counts, road condi-

tions and citizen requests. (The number of vehicles using roads on the eastern side of the county is given in the section on problems of the commuter.)

State and U. S. highways total about 153 miles in the county and include portions of three interstates, three major U. S. routes and five state roads. The Indiana State Highway Department has full responsibility for construction and maintenance of these roads. Few counties in the state are transversed east and west by as many super highways, but north-south roads, although less heavily traveled, are inadequate.

New highway construction will concentrate on a relocated state road going north and south through the urbanized eastern townships and on improvements in county and state roads leading into Indianapolis. East-west roads giving access to the central city will be widened and, in some cases, four lanes put in where commuter traffic has built up to several hundred cars a day. Construction on the southernmost interstate was completed in 1969.

The 10 towns in the county have a total of 86 miles of streets. Most of this is in the three biggest towns of Plainfield, Brownsburg and Danville. Each town either has its own street department or contracts with a private firm for street construction and maintenance. The typical small town of a few hundred persons has a county or state road as its main thoroughfare and often just a few blocks of town street to maintain on its own.

COMMUNITY PROBLEMS ASSOCIATED WITH URBANIZATION: A STUDY OF WASHINGTON TOWNSHIP

Data presented here come from personal interviews with a random sample of 116 residents of Washington Twp. in late 1968.

Impact on Agriculture

Farmers in rapidly urbanizing Washington Twp. are making many adjustments to the increasing population. Farming operations are changing in response to a changing environment. The seven changes rated by farmers in the township as having the greatest impact on farm management were, in order of frequency: (1) increased land prices and land rentals, (2) increased property taxes, (3) less land available for farming, (4) drainage problems caused by new construction, (5) difficulties in reaching and farming small tracts of land, (6) pressures to reduce livestock numbers, and (7) interference from construction work.

The most visible differences between farms in the urbanizing areas compared to more rural parts of the county are: reduced livestock operations, small, scattered fields, the mix of farm machinery and traffic on roads, and abandoned farm buildings.

A common complaint of farmers is high property taxes, which they associate with the influx of nonfarm residents. Since 1950, tax rates have about tripled, while assessments on farm property have increased with the general rise in land values. State law prescribes that land devoted to agricultural use be assessed as agricultural land, and the values used for farm land do not reflect potential value for development. But farm property taxes have increased faster than farm incomes.

The big benefit of urbanization to farmers in the township is the increased market value of their land. Farmers who sold unimproved land for residential or business development received \$2,000 to \$2,500 per acre. Real estate agents report that whole farms sell for at least \$1,000 an acre in the rapidly urbanizing areas and \$500 in the more sparsely-populated areas. Thus, while farmers in rural parts of the county pay about the same taxes as farmers in urbanized areas, the latter can sell out at a much higher price.

Perhaps because benefits of urbanization are offsetting environmental changes, few farmers were

critical of urbanization occurring in their neighborhood. When asked about the possible effects of urbanization on the farming community, over 75% thought that urbanization either had "no effect" or a "good effect" on such things as: (1) "making the community a more desirable place to live"; (2) "the way people get along with each other"; or (3) "community interest and participation by all residents." However, about 40% of the farmers did feel that urbanization had a "bad effect" on "moral and ethical standards."

Problems in Land Use

Residential development itself does not consume huge amounts of land, but it can lead to space and land use problems within the urbanizing area. A doubling of population in Hendricks Co. from 1950 to 1967 and an unusual amount of highway construction used up only 8% of the county's land area and has left over 80% predominately in farm use. Problems within the urbanizing area have more of an impact than the removal of farm land from agricultural production.

One problem is the land left idle between developments and in subdivisions awaiting construction of homes. This land is not being used as open space for recreation or scenic enjoyment. Considerable land is "locked in" back of homes that line the roads and will not be developed because of poor access. Land along roads is sold off first since development costs are lower, creating "strip development" that spreads out residential communities for long distances. This kind of "urban sprawl" increases the cost of extending public services, slows highway traffic and creates safety hazards. These attenuated communities lack any central core that ties residents together because of a common location. However, it may help to promote privacy and isolation.

In their efforts to create space around their homes, rural nonfarm residents may be buying more land around their homesite than can be used effectively. Average lot size in Washington Twp. was 2.8 acres, which is too small to farm, too large to landscape and maintain as a lawn. Very little land is owned by the public that could be used for parks, playgrounds or common open spaces. Thus, most of the land is in private hands and in tract sizes that rule out efficient utilization for anything except more single family dwellings. Farm land is still available between subdivisions that could be used for a different kind and pattern of development.

While land-use problems are developing in urbanizing areas, few residents seem to recognize the need for corrective actions. A high proportion (about 75%) of farm and nonfarm residents felt zoning regulations were "adequate."

The majority of farmers approved the way their land was zoned and the controls put on new developments. They wanted certain areas designated residential and business development but did not want their own farms zoned this way. On the other hand, they wanted the option of selling their land for development if the possibility arose. Over 90% wanted continued development in the area and did not favor an exclusive agricultural zone for the entire area, but would not favor greater restrictions on livestock and crop operations. In summary, they wanted to farm with few restrictions but be able to sell out to developers if offered a good price.

Nonfarm residents were not critical of land-use controls but preferred even larger lots in more open country. Their ideal was a home on a relatively large tract of land (6-8 acres), isolated from neighbors, but serviced by good roads and other high quality public services.

Problems usually associated with changes to more intensive land use were not of great concern to Washington Twp. residents. Home owners felt septic systems and water supply were "adequate" for 91% and 93% of their homes, respectively. Only a tiny fraction are served by a public water or sewer system. Many septic systems were still relatively new in 1968, and zoning regulations called for well-designed systems and inspection by health authorities. Local engineers and sanitarians predicted more problems as densities built up in subdivisions constructed on poorly drained soils and as systems got older.

Drainage was considered inadequate by about 30% of the rural nonfarm homeowners, with problems concentrated in certain sections of the township during spring and early summer. Little has been done in the way of public drains or ditches to carry off water.

Relationships Between Farm and Nonfarm Residents

While some aspects of suburban living and farming do not mix, nevertheless, conflicts between farm and nonfarm residents in Washington Twp. appear minimal. Nonfarm people had some complaints about livestock odors, but farm operations involving crop production bothered very few. About half would prefer that livestock be at least 1/2 mile away, but 90% would not mind having crops produced on adjoining land. Farm weed spraying, noise from farm equipment and other possible annoyances were of little consequence. About 7 out of 10 residents had no complaints whatsoever about farms in the area.

The attitude of nonfarm residents toward farmers themselves was generally favorable. Nearly 40% "were good friends" with at least one farm family; 67% felt farmers in their township "were progressive and open

mindful about change"; 70% felt farmers as a group showed "considerable interest and loyalty to the local community," and 80% would as likely vote for a farmer as for a nonfarmer in a county election.

Farmers blamed the rise in property taxes to new nonfarm residents. They noted particularly the impact on school costs, crime rates and congestion on roads. Farmers gave nonfarm residents a lower rating on "community interest and loyalty" than nonfarmers gave farmers. But 95% said they would not object to having nonfarm neighbors move in on adjoining land, and the majority reported close friendship with at least one nonfarm family.

Both farm and nonfarm residents had definite preferences as to who should live in the community and the kinds of homes constructed. Owner-occupied, single-dwelling homes were preferred. Rented single-family homes, duplexes, mobile homes and apartment houses were valued in descending order. About one-third of the residents interviewed would "object if people of some other race moved in next door." About 20% would object "if their next door neighbors had considerably less income and education."

Attitudes Toward Community Services

Both farm and nonfarm residents were asked to rate seven major public services in Washington Twp. The ratings of both groups agreed rather closely except for roads, which farm people rated significantly higher. Schools and fire protection were rated high by both groups; public transportation and police protection rated lowest (Table 15).

As noted earlier, the number of law enforcement officers on duty in the township is very small, and petty crime and larceny were on the increase in 1968. The only access to public transportation is one bus route through the center of the township. Schools were rated high, indicating considerable satisfaction with the school system's ability to accommodate greatly increased enrollment. A few residents wanted the schools to offer kindergarten, now available only on a private basis.

Fire protection was also rated high, because of a well-run voluntary fire department headquartered in the center of the township. County and township governments were ranked in the middle of the list of public services, partially because not many residents were familiar with local governmental activities. Roads were given a mixed rating, with several nonfarm residents critical of their carrying capacity during peak traffic loads in the morning and evening.

Survey respondents were also asked to rate six other services provided by public and private institutions, and to state where they obtained the services. Medical service was rated highest by both nonfarm and

farm residents, and adult recreation rated lowest. Private trash removal companies seemed to be giving quite satisfactory service. Nonfarm residents rated shopping facilities and cultural opportunities somewhat lower than farm residents. But both groups were very critical of the lack of youth and adult recreational facilities and programs in the local area (Table 16).

Farm residents used local services extensively, but nonfarm residents varied in the distance travelled to get specific services. This group went largely to Indianapolis and to some scattered towns for adult recreation and cultural opportunities. About half reported they shopped locally and half shopped in the central city. Medical service was obtained, in most cases, within the township or at the county hospital in Danville. Youth recreation was centered in the local school system, with some scattering to other locations.

The 116 Washington Twp. residents interviewed were also asked, "What is one improvement or change you would like to see in this community?" Law enforcement and police protection was clearly uppermost in their minds. Other responses were as follows:

1. Improved law enforcement & police protection—32.
2. Improved roads & public transportation—15.
3. Improved water, sewer & other utilities—15.
4. Improved school system—10.
5. Changes in planning & zoning controls—5.
6. Improved recreation & social opportunities—3.
7. Improved drainage—2.
8. Improved shopping facilities—2.
9. Unclassified & no responses—32.

Table 15. How Washington Twp. residents rated seven major publically-supported services in 1968.

Kind of service	Percent who responded:			
	Excellent	Good	Fair	Poor
Schools	21	57	20	2
Fire protection	16	69	11	4
Police protection	6	47	26	21
Roads	6	60	24	10
County government	5	65	23	7
Township government	4	64	26	6
Public transportation	0	21	26	53

Table 16. How Washington Twp. residents rated six other public/private services in 1968.

Kind of service	Percent who responded:			
	Excellent	Good	Fair	Poor
Medical services	11	58	20	11
Trash pickup	3	61	14	17
Shopping services	5	60	21	14
Cultural opportunities	3	53	20	24
Youth recreation	5	30	25	40
Adult recreation	0	31	22	47

THE "BEDROOM COMMUNITY" PHENOMENON

New residents in the rural-urban fringe come to the area to find a comfortable and ideal place to live. In Washington Twp. the living environment of its new citizens is separated from their working environment by an average of 11 miles. The township borders a large industrial area in Marion Co.

Problems of the Commuter

About 75% of the nonfarm residents commute to work in Marion Co.; 14% are employed in Hendricks Co. and the rest work in scattered locations outside these two counties. Close to 30% work on the west side of Indianapolis, another 13% on the west side of Marion Co., and about 6% in Washington Twp. This means relatively short trips for about half the commuters. The central city acts as a rather effective barrier for access to jobs on the east and north sides of the metropolitan area. Close to 20% of the wives worked at salaried jobs, but traveled only an average of 2.2 miles to work in stores and offices nearby.

Nearly $\frac{3}{4}$ of male workers were employed in three occupational classes: (1) managers, officials and pro-

prietors (20%), (2) craftsman, foreman and kindred workers (25%), or (3) operatives and kindred workers (28%). The "typical" commuter worked as a skilled craftsman, foreman or engineer in a large manufacturing plant on the west side of the central city. Very few were self-employed. The head of the household averaged 42 years of age, and families averaged 1.9 children at home. The average family has lived in the area 7.8 years. Few children were of working age.

When asked their reasons for moving to Washington Twp. and what they like about the community now, 25% mentioned location near their job as a major consideration, but only 11% mentioned location as a current favorable factor. Other evidence points to some dissatisfaction with commuting: complaints of crowded highways, lack of public transportation, the necessity for some to keep two cars, and feelings of isolation expressed by some wives.

Commuter traffic is heavy across the Hendricks-Marion Co. line on east-west roads leading to the central city (Figure 6). Morning and evening traffic puts a heavy burden on these roads, with the exception of the two new interstates that are designed for high volumes. U.S. 36 and County Road 100N near the center of Washington Twp. are particularly crowded and narrow.

By 1975 it is estimated 7,700 commuters from Hendricks Co. will travel to work in Marion Co. manufacturing plants alone. This represents a 250% increase over 1956.¹⁷ Improved Hendricks Co. roads, new expressways into downtown Indianapolis and completion of I-465 around the city will encourage commuters in the future.

Community Attitudes and Issues

People living in one county and working in another create some unique problems in their home community. From the survey, evidence points to some lack of community identification on the part of nonfarm residents of Washington Twp. As mentioned earlier, farmers gave nonfarm residents a lower rating on "community interest and loyalty" than nonfarmers gave farmers. Many nonfarm residents reported that their closest friends were not living in the immediate neighborhood; they made extensive use of public and private services outside the local area; and, of course, work interests and associations were many miles away.

Only $\frac{1}{4}$ of the nonfarm residents said their best friends lived close by. The other $\frac{3}{4}$ had made close friends with either people at work or in organizations of which they were members. Schools and churches

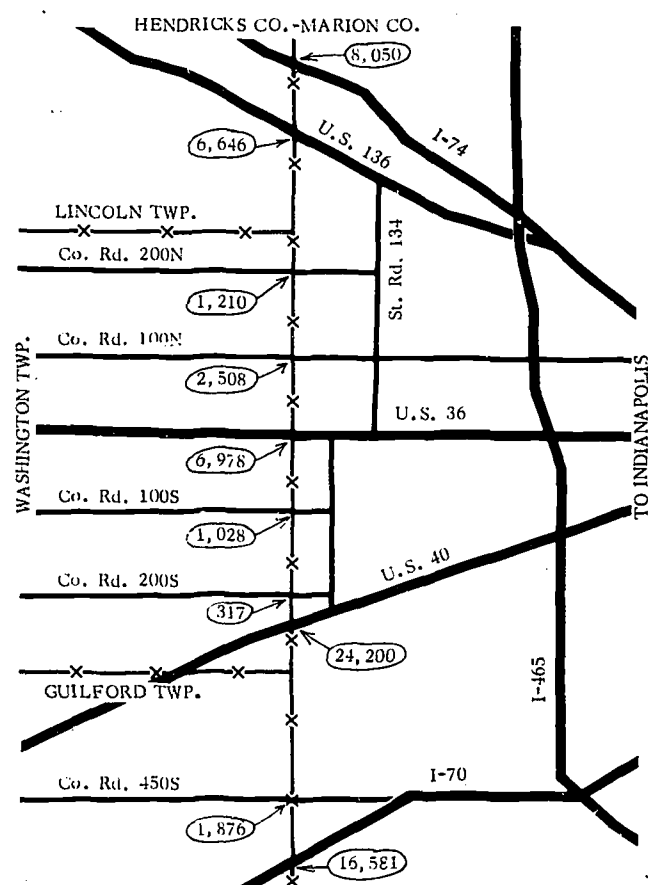


Figure 6. Average daily traffic volume of roads at the Hendricks-Marion County line, 1968. (Sources: State Highway Commission and Hendricks Co. Highway Department.)

¹⁷ *Manufacturing and Commuting in Metropolitan Indianapolis*, op. cit.

were the two main institutions at the neighborhood level that created some cohesion between residents. Little other community organization exists.

The scattered pattern of development works against community cohesion. The high value placed on "privacy" and "open space" suggests the desire for "apartness" rather than "togetherness." Residents exhibit characteristics of independence and conservatism that encourage individual more than group activities. And the need for community action has not been felt to any great degree, although future group effort might be spurred in the areas of community water and sewer systems and incorporation of urbanized areas to enable communities to improve public services.

One issue on which there is general agreement and strong motivation at present is the desire to maintain the present character of the area. Efforts to create new mobile home parks or high-rise apartment buildings are resisted by most residents. Low income people and people of other races are not generally welcome. Residents felt that no homes should be constructed that cost less than \$18,000 to \$20,000 and that large lots should be required.

Another controversial issue common to many "bedroom communities" is how the burden of taxation will be shared to support local services. The typical urbanizing community in the rural-urban fringe has a small proportion of real estate valuation in business and industrial property; therefore, residential property must bear the burden of local property taxation. Homes are often concentrated in one taxing jurisdiction, and industry in another. Unfortunately, this narrow tax base situation is found in many communities experiencing the biggest increase in demand for public services. The relatively small income from property taxes in residential communities is not offset by other tax sources in Indiana where state income and sales taxes go back to communities largely on the basis of population rather than on the need to supplement local property tax revenue.¹⁸

Hendricks Co. does not seem to have significantly higher property tax rates than nearby slow growing counties, however. And few urbanizing townships have higher tax rates than more rural townships within the county, refuting the hypothesis of higher tax rates in fast growing communities for Hendricks Co. at least. A comparison of tax rate increases from 1950 to 1965 for the 12 townships show little correlation between rate of population growth and amount of

tax rate increase. Per capita assessed valuation has an inverse correlation with population growth as discussed in the section on local taxes.

Many factors affect the amount of taxes levied by local officials. Residents may not be demanding more local public service in all townships and towns, and if they are, officials may be slow to respond. There is probably a tendency to also hold tax rates about the same.

Capital outlays for school buildings, service projects and other big investments cause variations from one local unit to the next and from one year to the next. The number and quality of public services vary widely. For example, not all towns and townships have library service. Fire fighting service is not tax-supported in all townships and is made up of volunteers in some cases, paid employees in others.

Economies of size in offering local services that lead to some efficiencies also complicate comparisons. Better and more public services in a fast-growing township do cost money, but costs per person may be going down with the larger population. The cost of increased local services is often shared by other taxing units as in the case of the county-wide school tax, or the school corporation that includes more than one township, or state aid to local schools.

Significantly, farmers complained a great deal about high property taxes in Washington Twp., but non-farm residents did not mention property taxes as a problem at all. Those new nonfarm residents moving from large cities were likely experiencing lower property taxes in Hendricks Co. than in their former residence, while farmers were very conscious of increases in tax rates and in assessed valuation on property held for many years.¹⁹

Urbanization will inevitably continue in this area, and even more pervasive and fundamental changes will occur. The formerly rural community will become more economically interdependent with the central city nearby. New community institutions will emerge with specialized, more professional functions to perform for the urban-oriented population in the future.

Farmers remaining in the county will also become more "urbanized" and "industrialized" as they become more exposed to urban life styles. Differences in value systems will continue to diminish among residents of the same community.

Less clear is the emerging relationship between the relatively affluent urban fringe residents and the residents in the older metropolitan core of the city. In their search for privacy and isolation, these new rural

¹⁸ An exception is state aid to local schools where the formula returns more aid to school corporations with low assessed valuation. But despite this, many school corporations with a great deal of industry in their boundaries do have considerably lower local tax rates than those with largely residential or farm property. (From *Report of Statistical Information for Indiana School Corporations*, Division of School Finance, State Department of Public Instruction.)

¹⁹ One unique characteristic of Washington Twp. that helps hold down tax rates is a large automated railroad switching yard that represents about 1/3 the total assessed valuation.

residents are moving away from the serious problems inherent in urban centers. To the extent that these new communities split off socially, culturally and politically from the central city, the gap between

them will widen. Potentially, the differences building between metropolitan core and urban fringe residents may have more serious implications than the old "farmer vs. city" conflicts fast fading away.

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